



Project Spotlights: I-105 Willamette Connector

OWNER

Oregon Department of Transportation
(ODOT)

GENERAL CONTRACTOR

Wildish Standard Paving

TOTAL CUBIC YARDS

8900

COMPLETION DATE

2018

CATEGORY

Value Engineering



ABOUT THE PROJECT

Originally specified as an imported fill under an existing bridge span, low-density cellular concrete (LDCC) was specified as an addendum to the I-105 Willamette Connector Project. After consultation with general contractors in the region, it became obvious that with the timing, height constraints and anticipated settlement during construction, using an imported fill would then become difficult. An alternative of using low-density cellular concrete was proposed as a means to reduce the timeframe, reduce settlement during construction (using LDCC's reduced weight) and using LDCC's no-compaction properties to fill under the bridge span.

THE SOLUTION

Like every job, safety is always the top priority. The ability to pump LDCC reduced equipment constraints of working under an active highway along with the tight conditions between girders. Safety concerns regarding fall protection were addressed with the general contractor prior to placement of the LDCC.

LDCC was placed in 1-2 foot lifts in stair-stepped fashion until flushed with the top of the abutments. The project was completed in 10 days at the very beginning of the job to start the process of removing girders. Imported fill was used up to the pavement section of the roadway.